

# **MULE DEER**



# Idaho Mule Deer Management Plan 2008 – 2017

## Executive Summary

### Introduction

Mule deer represent a true icon of the West, providing recreational, aesthetic, social, cultural, and scientific values for Idaho citizens. Mule deer hunting is a significant cultural and social bond for nearly 150,000 Idaho friends and families, and is a primary activity for maintaining the rich hunting heritage in Idaho.

The Idaho Fish and Game Commission and the Department of Fish and Game has a legal responsibility for conserving, protecting, perpetuating, and managing all of Idaho's wildlife. To fulfill that obligation Fish and Game is guided by a strategic plan (The Compass). The Compass, adopted in 2005, broadly describes objectives for four major goals: 1) sustain Idaho's fish and wildlife and the habitats upon which they depend, 2) meet the demand for fish and wildlife recreation, 3) improve public understanding of and involvement in fish and wildlife management, and 4) enhance the capability of Fish and Game to manage fish and wildlife and serve the public. The Compass by design contains no details; it is broad in scope. This mule deer management plan functions as an "action plan" referenced in The Compass and provides the specific goals, strategies, and performance objectives for management of mule deer.

This plan isn't designed to prescribe specific hunting seasons, rather it is designed to establish goals Fish and Game, working with mule deer enthusiasts, will achieve over the next 10 years. Overall, the plan directs Fish and Game to maintain or increase

current mule deer populations, and provide for additional mature buck hunting opportunities. Overall, the plan is ambitious and will require public support and additional financial resources for full implementation. Fish and Game will work to engage additional partners in mule deer management, including the governor's office, other elected officials, federal and state agencies, conservation organizations, private landowners, and sportsmen. Partnerships, combined with a common desire to improve mule deer management, will go along way to achieving the original vision of the mule deer planning team:

*"Abundant mule deer occupying healthy habitats ensuring a rich recreational, cultural, and public heritage for current and future generations"*

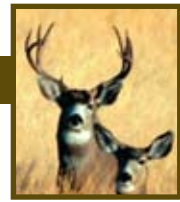
### Changing Landscapes, Changing Mule Deer

Mule deer populations and mule deer habitat have changed over time, and will continue to do so. More than 100 years ago, mule deer were not abundant in most parts of Idaho. About the time white men arrived, the landscape started changing. Vast fires in central and north central Idaho converted forested communities to productive shrubfields. In southern Idaho, fire suppression combined with intense livestock grazing promoted shrubs on predominately grass ranges. Both of these changes, combined with extensive predator control and limited hunting, resulted in an environment ideal for mule deer populations to flourish.



Mule deer numbers became so high in the 1950s and 1960s that deer began to overuse their habitat, still evidenced today by "high-lining" on many juniper and mountain mahogany winter ranges. Management direction was to reduce mule deer populations and restore healthy winter ranges. Fish and Game offered liberal hunting seasons, including hunting into December and multiple deer tags per hunter. Deer populations began to decline, and by





## Meeting Hunter's Expectations

Ultimately, mule deer are managed for the benefit of Idahoans, many of them hunters who eagerly look forward to the annual mule deer hunt. To develop a better understanding of the motivations and management preferences of Idaho mule deer hunters, Fish and Game contracted with the University of Idaho to conduct a scientific survey in 2006. More than 4,500 hunters participated in the survey. The survey showed a wide array of motivations and preferences. For most, the social experience of gathering with friends and family is the most important reason for mule deer hunting. For others, putting meat on the table is important. And for some, harvesting a mature buck is important.

Overall, survey respondents were generally unsatisfied with the number of deer seen, the number of bucks seen, and the number of mature bucks seen during the 2006 hunting season. Conversely, a majority of hunters were satisfied with their overall experience, and the opportunity to hunt mule deer. Notable was the preponderance of hunters that indicated a willingness to forgo larger bucks for the opportunity to hunt more frequently.

A similar survey conducted in 1987 shows two major differences between mule deer hunters in the late 1980s and those of today. The social aspect (hunting with friends and family) is far more important today. And about half of all mule deer hunters today use ATVs; five times higher than in the late 1980s. When asked about the primary reason for a dissatisfying hunt, the most common response was "improper use of ATVs."

In addition to the survey, Fish and Game hosted a mule deer workshop in Pocatello in August, and several public meetings throughout the state in

Idaho. While some populations have rebounded since that winter, others have not.

Over the past 50 or more years, mule deer have shared an environment much different than they had the previous 100 years. Elk populations have increased dramatically. Livestock grazing practices have changed, promoting grasses. Agricultural practices have changed, converting winter wheat and other agricultural crops used by deer to monocultures of grasses through the Conservation Reserve Program. Human development, especially on low elevation winter ranges, has increased substantially. And predators, including the recently reintroduced gray wolf, have increased. All of these factors have complicated, and will continue to complicate, the management of mule deer.



Idaho's landscape will continue to change, and mule deer populations will continue to fluctuate. Though mule deer managers can't eliminate the loss of wildlife habitat to human development, they can improve the remaining habitat, making it support more mule deer. Additionally, Fish and Game can influence elk and predator populations, striving for a balance. Finally, working with farmers and ranchers, the Department can encourage the development of healthy mule deer habitat on private land.

the 1970s there was concern throughout much of Idaho about too few deer. Fish and Game responded with restrictive hunting regulations.

Populations began growing in the early 1980s and continued until the early 1990s when significant drought gripped much of Idaho. Long-term drought and a harsh winter in 1992/1993, resulted in a significant decline in mule deer across southern

September and October to provide more opportunities for refining overall management direction.

This plan provides for a diversity of hunting experiences to meet the varying motivations and preferences of Idaho mule deer hunters. While it's not possible to provide for all types of experiences in all places, a range of opportunities will be available throughout the state. Each region will offer at least two types of hunting opportunity including general, quality or high-quality.

These opportunities can be broadly characterized as:

Characteristic	Type of Hunting Opportunity		
	General	Quality	High-Quality
<b>Hunter Success</b>	~25%	~50%	~75%
<b>Percent Mature Bucks (4 points)</b>	>25%	>40%	>60%
<b>Hunter Crowding</b>	0.3 – 3.5 hunters per square mile	<0.5 hunters per square mile	<0.1 hunter per square mile
<b>Opportunity to Hunt Every Year</b>	100%	~ 30%	<10%
<b>Buck:Doe Ratio</b>	~15 per 100 does	~25 per 100 does	~35 per 100 does

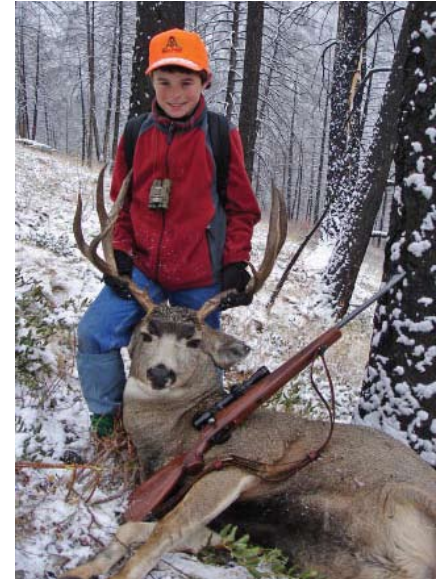
Most hunting opportunities offered will be general, addressing the preferences and desires of a majority of mule deer hunters for annual recreational opportunity with family and friends. Additional mature buck hunting opportunities will be provided, especially in those regions not now offering that type of experience.

Use of ATVs has increased substantially over the past 20 years. The most common reasons for using ATVs are to enjoy hunting with friends and family that use them, and to retrieve game. And the use of ATVs becomes an attractive accommodation for hunters getting older and less physically capable of extended hikes. But not all hunters enjoy ATVs. Fish and Game will work with federal and state land managers, private land owners, and hunters to encourage a balance of motorized and nonmotorized hunting opportunities. Fish and Game also will use the Motorized Vehicle Rule judiciously to ensure a balance of experiences exists.

Fish and Game will develop a guide to mule deer hunting in Idaho to help hunters find hunting opportunities that meet their desired experience.

## Habitat

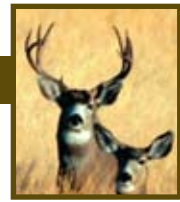
Ultimately, healthy wildlife populations depend on adequate amounts of quality habitat. Hunting, disease, weather and predators affect mule deer. But healthy habitat has greater influence over the total abundance of mule deer. Fish and Game has limited authority for habitat management, which is mostly in the hands of federal land managers and private land owners. Only through collaborative working relationships will Fish and Game influence habitat practices that meet mule deer needs. Fish and Game will increase efforts to work with federal land managers and private landowners to improve habitat for mule deer. Programs, such as the Mule Deer Initiative, are opening doors, allowing Fish and Game to aggressively treat habitat, especially on private land.



This plan directs Fish and Game to improve habitat on more than 10,000 acres annually. Achieving this goal will require support and additional resources from elected officials, private landowners, federal and state land managers, and hunters. Though 10,000 acres may seem large, it is small compared to what ultimately is needed to meet the needs of a larger mule deer population. Further support, commitment, and partnerships will be actively pursued by Fish and Game to achieve habitat management goals.

Mule deer habitat is not stagnant; it will require constant attention and management – whether it means actively managing forested communities for younger seral stages and more shrubs, or protecting sagebrush-steppe habitats from fire and invasive species. Sometimes deciding how best to manage habitat for mule deer is difficult. The Western Association of Fish & Wildlife Management Agencies, through the Mule Deer Working Group, is developing comprehensive mule deer habitat management guidelines. These guidelines are expected to be complete by 2009. Fish and Game will actively encourage federal, state and private habitat managers to incorporate these guidelines into land use decisions.





## **Mule Deer Management Goals**

Fish and Game plans to achieve the following mule deer management goals over the next 10 years:

- Provide mule deer hunting opportunities that reflect the preferences and desires of hunters.
- Maintain healthy and productive mule deer populations.
- Establish short-term and long-term population objectives that represent maintenance of, or increase in, current mule deer population levels.
- Maintain annual hunting opportunity.
- Increase the opportunity for mature buck hunting, equitably distributed throughout the state.
- Implement predator management actions when and where appropriate to aid in achieving management objectives.
- Encourage recruitment of new hunters and retention of existing hunters.
- Use antlerless harvest judiciously and conservatively to achieve management objectives.
- Develop simple and easily understood regulations that encourage participation in deer hunting.
- Fully implement the Mule Deer Initiative Action Plan.
- Improve and protect over 10,000 acres of habitat annually.
- Encourage land management agencies to incorporate mule deer habitat needs in agency decisions.
- Manage mule deer populations proportionate to habitat capabilities.
- Evaluate a cost-effective and reliable habitat monitoring program.

- Reduce illegal harvest, especially of mature mule deer bucks; and reduce commercialization of mule deer parts.
- Improve population monitoring programs.
- Work with landowners and sportsmen to minimize and mitigate for depredations.
- Improve management coordination with other agencies and organizations.
- Implement special investigations to improve population and habitat management capabilities.
- Provide information and improve public understanding of mule deer management in Idaho.
- Ensure continued citizen involvement in mule deer management.

## **Population Goals**

Based on mule deer movements, similar habitats, and similar management objectives, the state is divided into 15 Population Management Units (PMUs), representing “distinct” mule deer populations. Population goals (maintain or increase) have been established for each of the PMUs based on population status relative to long-term abundance, habitat conditions, and stakeholder desires. And, short- and long-term population goals are established for each PMU. Short-term goals are for one to three years, achieved primarily through hunting season frameworks. Long-term goals represent mule deer populations three to 10 years from now. Long-term goals will require completion of many of the strategies outlined in the plan, particularly habitat improvements.

Overall, Fish and Game will manage for more mule deer. Short-term goals in eight of 15 PMUs are for increased populations. Long-term goals in 11 of 15 PMUs are for increased populations. PMUs managed to maintain the current populations are in areas where few mule deer exist, where white-tailed deer or elk receive priority, or where the mule deer populations are at or near recent historical highs.

Fish and Game will establish short- and long-term numerical population objectives for 13 of 15 of the PMUs after conducting a census of each PMU over the next four years.

## Antlerless Harvest

The use of antlerless harvest is an important tool for a number of objectives including:

- To achieve desired population levels.
- Address depredation concerns.
- To increase productivity (e.g. number of bucks added to the population each year).
- Provide additional hunting opportunity.
- Increase opportunities for hunter recruitment and retention.

But antlerless harvest must be used cautiously to prevent over-harvest of deer populations. Fish and Game will implement a number of management changes to ensure antlerless harvest is used appropriately. Fish and Game will use a conservative approach by using science-based adult doe harvest reference values to determine if overall antlerless harvest is consistent with population goals. Allowable antlerless harvest will be determined annually based on population goal, fawn production, over-winter fawn survival, and adult doe survival. Additionally, Fish and Game will monitor body condition, age structure, habitat

conditions, and antler growth rates to determine whether populations are nutritionally limited and additional antlerless harvest is needed to balance deer populations with available habitat.

## Predator Management

Managing predators to increase mule deer populations is a complex issue, in part because different segments of society value predators differently, and because previous efforts have met with mixed results. Nonetheless, predator management is desired by many hunters and is an important tool for Idaho Fish and Game.

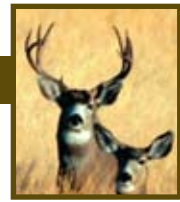
Determining whether predator management will benefit mule deer populations requires a complex analysis of predator and prey population status, nutritional status of prey, cause-specific mortality, logistical considerations and scale of the predator management effort, and social and economic considerations. As a general rule, predator management can result in more mule deer when the following conditions are met:

- Prey population is not limited by nutrition (e.g. below carrying capacity).
- Predators are a primary source of mortality.
- Significant numbers of predators can be removed economically.
- Predator removal efforts are timed just prior to predator or prey reproductive periods (e.g. spring).
- Predator management efforts are focused on small areas.

Mountain lions and coyotes are the primary predators of mule deer in Idaho. Following significant reductions in mule deer populations (e.g. after a hard winter), Fish and Game will liberalize, for the short-term, mountain lion hunting seasons to reduce predation pressure when populations are low. Additionally, the Idaho Fish and Game Commission will continue to direct the use of Fish and Game funds provided to the Animal Damage Control Board for control of predators, focusing efforts where the most benefits can be gained.







## Mule Deer Monitoring

In 1998, Fish and Game initiated a new monitoring program that provided more information on mule deer populations than ever before gathered. New information collected included over-winter fawn survival, migratory movements and annual changes in populations. Annual population changes were determined by conducting aerial surveys over specific large winter ranges, or trend areas, every year. The use of trend areas provides a reliable index to large changes in populations. But relying solely on trend areas may not provide information on more subtle population changes, especially those occurring on small winter ranges. The use of trend areas also doesn't allow mule deer managers to generate a total population estimate for a geographic area.

This plan initiates further refinements in mule deer population monitoring. Fish and Game will no longer solely rely on specific winter ranges. Rather, less frequent but more comprehensive aerial surveys will be conducted to generate total population estimates for 13 of the 15 PMUs. Periodic complete population estimates, combined with annual data on fawn production, over-winter fawn survival, and adult doe survival will allow Fish and Game to track total population status annually. As the price of helicopter rentals continue to escalate, and availability of suitable helicopters and experienced pilots decline, the new monitoring program will enable Fish and Game to continue to monitor populations accurately in the future with less reliance on aerial surveys.

Fish and Game will continue to operate check stations and require mandatory reports to provide information on harvest. Check stations are primarily used to solicit early input on how hunting seasons are progressing, to collect biological data, and provide

an opportunity to interact with hunters. Fish and Game will continue to use the mandatory harvest report, but will implement changes to improve data quality, increase timeliness of the information, and simplify compliance by hunters.

## The Future

Mule deer and mule deer managers today are facing new and ever changing challenges, including habitat loss and modification, an aging hunter base with differing desires, greater reliance on motorized vehicles, and an increased importance of the social aspects of mule deer hunting. This plan is a continued effort by Fish and Game to address these challenges, provide direction and specific management objectives over the next 10 years.

Many of the strategies outlined in this plan will result in functional changes in how Fish and Game manages mule deer. Some changes will require mule deer hunters to make concessions, but Fish and Game will work cooperatively with those hunters to minimize or mitigate effects while maintaining focus on achieving the objectives desired by most mule deer enthusiasts.

Fish and Game is committed to establishing collaborative working relationships with all stakeholders, because without their support and commitment, mule deer populations will continue to decline. Ultimately, Fish and Game has a legal obligation to ensure mule deer thrive and the needs of mule deer enthusiasts are met. We willingly accept this obligation and look forward to actively implementing on-the-ground actions to maintain mule deer as an icon on Idaho's landscape.



